<u>REMARKS</u>

I.    <u>Introduction</u>

   In response to the Office Action dated September 27, 2006, claims 2, 11, and 15 have been cancelled, claims 1, 3-10, 12-14, and 16-18 have been amended, and claims 19-21 have been added. Claims 1, 3-10, 12-14, and 16-21 remain in the application. Re-examination and re-consideration of the application, as amended, is requested.

II.    <u>Specification Objections</u>

   In paragraph (2) of the Office Action, the specification was objected to for failing to comport with the US format. Applicants have amended the specification to include the appropriate section header identifiers. Accordingly, Applicants submit that the objections are now moot.

III.    <u>Non-Art Rejections</u>

   In paragraphs (3)-(4) of the Office Action, claims 1-18 were rejected as reciting numbers that correspond to figure elements and/or the specification. Applications have amended the claims to remove such number recitations and submit that the rejection is now moot.

   In paragraphs (5)-(6) of the Office Action, claims 1-18 were rejected under 35 U.S.C. §112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. Applicants have amended the claims to more accurately depict the invention and submit that the claims do not omit any essential step. Accordingly, Applicants submit that the rejection is now moot.

   Claims 1-18 are also rejected under 35 U.S.C. §112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. Applicants have amended the claims to more accurately depict the invention and submit that the rejection is now moot.

IV.    <u>Prior Art Rejections</u>

   In paragraphs (8)-(9) of the Office Action, claims 1-18 were rejected under 35 U.S.C. §102(b) as being anticipated by Krause et al., "Processing of CAD-Data – Conversion, Verification and

-7-

G&C 30566.358-US-WO

Repair," Proceedings of the Fourth Symposium on Solid Modeling and Applications (Krause).

Claims 9-18 were rejected for the same reasons.

Specifically, claim 1, 9, and 10 were rejected as follows:

> 1.    (ORIGINAL)    A method for solving problems that are related to geometrical properties of objects (36, 40) processed by a CAD program (10), said method comprising the following steps performed by a computer:
>       -    identifying a possible problem related to a geometrical property of at least one object (36, 40) processed by said CAD program (10) [abstract; see entire paper],
>       -    displaying an indicator symbol (26, 52) in a drawing window (12) of said CAD program (10), said indicator symbol (26, 52) being shown in graphical association with at least one entity (20, 24, 38, 50) processed by said CAD program (10), said entity (20, 24, 38, 50) being related to said identified possible problem [sections 3-4. See fig. 5-6],
>       -    receiving a user action related to the indicator symbol (26, 52) [sections 3-4; fig. 5; pg. 252-col. 2],
>       -    providing problem solving assistance to the user in response to said user action [section 5; fig. 5; pg. 252 – col. 2].

In addition, dependent claim 2 was rejected as follows:

> 2. The method of claim 1, wherein said problem solving assistance provided to said user comprises presenting said user with at least one problem solving command [sections 3-4; fig. 5; pg. 252 – col. 2].

Applicant traverses the above rejections for one or more of the following reasons:

(1)    Krause does not teach, disclose or suggest identifying a problem that is caused by a user;

(2)    Krause does not teach, disclose or suggest displaying an indicator symbol in a drawing window of the CAD program; and

(3)    Krause does not teach, disclose or suggest providing problem solving assistance to a user that consists of a command that the user can select interactively.

Independent claims 1, 9, and 10 are generally directed to solving problems in a CAD program. More specifically, when working in a CAD program, a user may cause various problems, e.g., misaligning a wall, attempting to display wall dimensions when a cutplane has a value larger than the height of the wall, etc. In this regard, the claims specify that such a problem is related to a geometrical property of at least one object in the drawing. Embodiments of the invention provide an interactive way to solve such problems. Accordingly, the claims provide for displaying an indicator symbol in the drawing window in a graphical association with an entity that is related to the problem. User input is received in relation to the indicator symbol (e.g., right clicking the symbol).

-8-

G&C 30566.358-US-WO

Problem solving assistance is then provided to the user in response to the input. In the amended claims, such problem solving assistance consists of presenting the user with a problem solving command (e.g., a list of options to choose from that could solve the problem) that the user can select interactively.

The cited references do not teach nor suggest these various elements of Applicant's independent claims.

Krause merely describes a conversion of geometric model between different CAD programs (See Abstract). Krause describes that during the conversion process, errors in the data of the model can be found. A set forth in section 3, the model is first analyzed with respect to application driver requirements, an identification of a problem area is identified, and the model is modified. Again, the problems are identified as part of the conversion of a model from one CAD environment to another (see section 4). Various methods are used to solve any problems found during the conversion process.

However, Krause lacks any discussion about identifying problems caused by a user. In this regard, rather than describing a problem that is caused by a user while interacting with a CAD program, Krause is concerned with problems caused when one CAD model is exported and imported into another CAD model. Such an approach is completely and entirely unrelated to that of the present invention.

In addition, the present invention provides for displaying an indicator that is shown in graphical association with the problem in the drawing window. Various solutions are then presented to the user that the user can interactively select. As claimed, such problem solving assistance are solutions that can be used to solve the problem that has been identified. In this regard, the claimed problem solving assistance of the present invention is not merely the user activating a function from a menu at the top of the screen that is unrelated to the problem or that is not displayed in conjunction with an indicator. Instead, the commands that are presented to the user are presented in response to user input related to the indicator symbol that is displayed on the screen.

Such a display and interaction with a user is neither taught nor suggested by Krause. Section 3 of Krause provides:

> Basic functionality of an improved CAD data processing therefore includes application-driven verification functionality information on identified inaccuracies and facilities for model improvement. The latter can be realized as a set of menu functions for interactive geometry

-9-

G&C 30566.358-US-WO

modification. Another variant is a programming interface allowing the development of user-defined repair functions.

Firstly, as pointed out above, the problems are based on the conversion process. Secondly, the above description completely fails to describe the specifically claimed interactive steps of the present invention. Instead, such text merely describes the use of menu functions (e.g., from the top of an application). Such a description fails to describe the display of an indicator symbol, a user activating the input symbol, and providing commands in response to the activating that the user can select interactively. In this regard, the mere use of menu functions does not and cannot teach the invention as claimed.

The Office Action has also relied on section 5 to teach the limitations of original dependent claim 2. Section 5 describes a prototype system of Krause wherein the system analyzes an existing model from a different CAD environment. The prototype does not identify problems caused by a user. Instead, the problems result from the conversion. In addition, the prototype does not provide the display of commands or the interactive problem solving process of the claimed invention. Instead, two different screens are displayed with a structure tree in a window. In this regard, section 5 fails to describe an indicator and also fails to describe the presentation, to the user, of a command that the user can select interactively (all of which are in response to user input relating to the indicator symbol).

Moreover, the various elements of Applicant's claimed invention together provide operational advantages over Krause. In addition, Applicant's invention solves problems not recognized by Krause.

Thus, Applicant submits that independent claims 1, 9, and 10 are allowable over Krause. Further, dependent claims 3-8, 12-14, and 16-21 are submitted to be allowable over Krause in the same manner, because they are dependent on independent claims 1, 9, and 10, respectively, and thus contain all the limitations of the independent claims. In addition, dependent claims 3-8, 12-14, and 16-21 recite additional novel elements not shown by Krause.

V.      Conclusion

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited. Should the Examiner believe minor matters still remain that

-10-

G&C 30566.358-US-WO

can be resolved in a telephone interview, the Examiner is urged to call Applicant's undersigned attorney.

Respectfully submitted,

GATES & COOPER LLP
Attorneys for Applicant(s)

Howard Hughes Center
6701 Center Drive West, Suite 1050
Los Angeles, California 90045
(310) 641-8797

Date: <u>December 22, 2006</u>

By: _____
Name:  Jason S. Feldmar
          Reg. No.:  39,187

JSF/

G&C 30566.358-US-WO

-11-